



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/830,028	08/15/2001	Markku Verkama	P279295	9392	
909	7590 11/28/2006		EXAMINER		
PILLSBURY	WINTHROP SHAW PIT	ΓTMAN, LLP	IQBAL, KHAWAR		
P.O. BOX 105 MCLEAN, V		,	ART UNIT	PAPER NUMBER	
			2617		
			DATE MAILED: 11/28/200	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	09/830,028	VERKAMA, MARKKU	
Office Action Summary	Examiner	Art Unit	
	Khawar Iqbal	2617	,
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING Description of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 136(a). In no event, however, may a divill apply and will expire SIX (6) MO te, cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this communication BANDONED (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on <u>05 (</u> This action is FINAL . 2b)⊠ This 3)□ Since this application is in condition for allowed closed in accordance with the practice under	is action is non-final. ance except for formal mat	•	s
Disposition of Claims			
4) ☐ Claim(s) 1-17 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-17 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/e	awn from consideration.		
Application Papers			
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	cepted or b) objected to e drawing(s) be held in abeya ction is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(c	d).
Priority under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat * See the attached detailed Office action for a list 	nts have been received. Its have been received in A ority documents have beer au (PCT Rule 17.2(a)).	Application No received in this National Stage	
Attachment(s) 1) ☑ Notice of References Cited (PTO-892)	4) 🗖 Intentions	Summary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No	s)/Mail Date nformal Patent Application	•

Art Unit: 2617

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabipour et al (6324515) and further in view of Tseng et al (6172974).
- 3. Regarding claim 1 Rabipour et al teaches a digital telecommunication system comprising (figs. 1-4, col. 9, lines 6-65):

a first center configured to enable speech communication between a plurality of terminals, the first center being associated with a calling terminal and including a first transcoder unit (col. 10, 3-46, col. 11, lines 11-37);

a second center that is configured to enable speech communication between a plurality of terminals, the second centre being associated with a called terminal and including a second transcoder unit (col. 10, 3-46, col. 11, lines 11-37),

wherein the first and second transcoder units each include speech codecs (col. 10, 3-46, col. 11, lines 11-37), and each of the terminals comprises one or more speech codecs (col. 10, 3-46, col. 11, lines 11-37), the terminals being arranged to provide information regarding the supported one or more speech codecs to their associated switching centers (col. 10, 3-46, col. 11, lines 11-37);

Art Unit: 2617

the first centre is configured to perform handshaking with the second center, the handshaking including indication of the speech codecs supported by the calling terminal (col. 10, 3-46, col. 11, lines 11-37) wherein at least one of the first and second centres is configured to choose the speech codec used commonly by the calling and called terminals (col. 10, 3-46, col. 11, lines 11-37), and wherein at least one of the first and second centres is configured to establish call connections that bypass one or more of the transcoder units or to control the transcoder units to transmit encoded speech between the called and calling terminals without performing speech encoding operations so that speech is encoded and decoded only in the terminals (col. 10, 3-46, col. 11, lines 11-37). Rabipour et al does not specifically teach codecs including an encoder unit and decoder unit.

In an analogous art, Tseng et al teaches codecs including an encoder unit and decoder unit (col. 7, lines 1-46, col. 9, lines 40-60). Tseng et al also teach regarding claims 2-3,8-9 mobile switching center (12A, 12b, MSC/BSC, see fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Rabipour et al by specifically adding features codecs including an encoder unit and decoder unit and mobile switching center in order to enhance system performance Improves voice quality by using an encoding algorithm better matching the decoding algorithm and improving the speech quality in wireless communication as taught by Tseng et al.

Regarding claim 4 Rabipour et al teaches wherein the handshaking is performed as outband signaling (col. 10, 3-46, col. 11, lines 11-37).

Art Unit: 2617

Regarding claim 5 Rabipour et al teaches wherein the first and second centres are configured to perform the handshaking in association with a routing information inquiry issued in response to a determination that the called terminal is a mobile subscriber (col. 10, 3-46, col. 11, lines 11-37).

Regarding claims 6,7 Rabipour et al teaches the first center is configured to send the routing information inquiry including information associated with the speed coded sported by the calling terminal (col. 10, 3-46, col. 11, lines 11-37).

Regarding claims 10,11 Rabipour et al teaches wherein, when required, at least one of the first and second centre is configured to notify the associated of the speech codec it has to use as the result of the handshaking (col. 10, 3-46, col. 11, lines 11-37).

Regarding claim 12 Rabipour et al teaches wherein a pulse code modulated digital link exists between the first and second centres, and the first and second centres are configured to control their respective transcoder units to adapt an encoded speech signal to one or more least significant bits of PCM samples without transcoding (col. 10, 3-46, col. 11, lines 11-37).

Regarding claim 13 Rabipour et al teaches the system configured to support packet link (col. 3, lines 30-40, and col. 4, lines 5054).

Regarding claim 14 Rabipour et al teaches a centre in a digital telecommunication network configured to receive information regarding supported one or more speech codecs of a calling terminal and connect a transcoder located in a transcoder unit to a call connection when required, wherein (figs. 1-4, col. 9, lines 6-65):

Art Unit: 2617

the centre is configured to perform handshaking with another centre associated with a called terminal (col.10, 3-46, col. 11, lines 11-37), the handshaking including indication of speech codecs supported by the calling terminal associated with the centre (col. 10, 3-46, col. 11, lines 11-37), the centre also being configured to choose the speech codec commonly used by the terminals (col. 10, 3-46, col. 11, lines 11-37), and the centre is configured to connect a call connection that bypasses the transcoder unit or to control the transcoder unit to transmit the encoded speech without performing speech encoding operations in such a way that speech encoding and decoding are only performed in the calling or called terminal (col. 10, 3-46, col. 11, lines 11-37). Rabipour et al does not specifically teach codecs including an encoder unit and decoder unit.

In an analogous art, Tseng et al teaches codecs including an encoder unit and decoder unit (col. 7, lines 1-46, col. 9, lines 40-60). Tseng et al also teach regarding claims 15-17 signaling is ISUP setup is an IAM and ANM message (see fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Rabipour et al by specifically adding features mobile switching center signaling is ISUP setup is an IAM and ANM message in order to enhance system performance Improves voice quality by using an encoding algorithm better matching the decoding algorithm and improving the speech quality in wireless communication as taught by Tseng et al.

Response to Arguments

4. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Page 6

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khawar Iqbal whose telephone number is 571-272-7909.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GEORGE ENG can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Khawar Iqbal

GEORGE ENC
SUPERVISORY PATENT